Memorandum

Date : January 28, 2002

то : Celeste Cantú Executive Director

State Water Resources Control Board

Post Office Box 2000

Sacramento, California 95812-2000

From : Department of Water Resources

Subject: Water Level Response Plan Pursuant to D-1641

Enclosed for your approval is the Response Plan for Water Level Concerns in the South Delta Under Water Rights Decision 1641. The plan was developed pursuant to the State Water Resources Control Board's Water Rights Decision 1641 regarding joint points of diversion for the State Water Project and the Central Valley Project. The Response Plan details conditions for the use of joint point of diversion and additional pumping in the Delta to accommodate water transfers by the Department of Water Resources or the Bureau of Reclamation.

The Department and the Bureau staff developed this plan in coordination with Mr. John Herrick and Mr. Alex Hildebrand, of the South Delta Water Agency. Representatives from the California Department of Fish and Game, U.S. Fish and Wildlife Service, and National Marine Fisheries Service were also consulted throughout the development of this plan. Although the Department, the Bureau, and SDWA worked closely to finalize this document, SDWA could not agree to some fundamental aspects of the Response Plan.

The Response Plan does not address water level impacts due to existing operations and the resulting impact to agricultural diversions in the South Delta for reasons including tidal conditions, channel siltation, and the legal operations of the SWP and CVP. The Response Plan does provide an appropriate process to address water levels of concern in the South Delta that may result from the incremental effects of joint point of diversion and water transfers.

This Response Plan includes provisions for forecasting water levels, mitigating incremental effects of joint point and transfers, developing preventative measures for problematic agricultural diversions, and maintaining regular communication between the Department, the Bureau, and SDWA.

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No action or measure taken pursuant to this Response Plan should be considered a final resolution of water level, circulation, or quality problems in the South Delta associated with the operation of the SWP and CVP. The Department and the Bureau will continue discussions with SDWA on outstanding issues through the South Delta Improvement Program process.

Joint point of diversion and water transfers are two vital components for the protection of fishery resources included in the CALFED Bay-Delta Record of Decision.

The Department and the Bureau request your approval of this plan as required by Water Rights Decision 1641.

If you need any further information regarding this plan, please contact Curtis Creel, Department of Water Resources, at (916) 574-2722 or Paul Fujitani, Bureau of Reclamation, at (916) 979-2197.

Carl Torgersen, Chief

SWP Operations Control Office

Division of Operations and

Maintenance

Chester Bowling, Operations Manager

Central Valley Operations Office

Chest 7, Bowl

Bureau of Reclamation

Enclosure

cc:

Mr. Alex Hildebrand South Delta Water Agency Post Office Box 73092 Stockton, California 95267

Mr. John Herrick South Delta Water Agency Post Office Box 73092 Stockton, California 95267

Response Plan for Water Level Concerns in the South Delta Under Water Rights Decision 1641

Staff from the Department of Water Resources (DWR) and the United States Bureau of Reclamation (Reclamation) have developed this Water Level Response Plan per the conditions set forth in the State Water Resources Control Board's Water Rights Decision 1641 regarding joint points of diversion for the State Water Project (SWP) and the Central Valley Project (CVP). This Plan sets conditions for the operations of the SWP and the CVP as they pertain to the use of Joint Point of Diversion and additional pumping in the Delta to accommodate water transfers.

Reclamation and DWR will manage water transfers of their own and those of third parties consistent with this Plan. Third parties will be given the opportunity to participate financially in the actions called for in the Plan to mitigate for the incremental effects of their water transfer on water levels or have their water transfer rescheduled, if possible, to a time period when these effects do not occur.

Actions covered by this Plan

This Plan establishes a process to address water levels of concern when such concern results from the incremental effects of JPOD and additional pumping to accommodate water transfers on water levels in the south Delta. An incremental effect on water levels is defined as a reduction in water surface elevation at low tide from what would occur absent the action. Water levels of concern shall be the levels at which ongoing or scheduled diversions¹ in the southern Delta are no longer possible.

Reclamation, DWR, and SDWA shall strive to maintain diligent communication regarding the planning and execution of any action referencing this Plan and expected diversions throughout the southern Delta. This Plan assumes the continued existence of CVP/SWP facilities within the existing permitted export capabilities as of autumn of 2001, and shall be updated upon completion of any new facilities in the South Delta.

Actions covered by this plan shall be contingent on forecasted water levels in the southern Delta. For Condition II below, these forecasts must indicate the action will not cause or aggravate water levels of concern.

<u>Condition I.</u> The following conditions provide a general description under which an action will not cause or aggravate water levels of concern.

- 1) A shift of pumping from CVP facilities at the Tracy Pumping Plant to SWP facilities at the Banks Pumping Plant and
 - a) total exports during the period do not increase over that which would have

¹For the purpose of this plan, both Reclamation and DWR consider diversions made in the southern Delta to be authorized by the State Water Resources Control Board and therefore legal. However, both agencies reserve the right to review and modify their position on specific diversions if such diversions have insufficient water rights during times when water level issues are a concern. This provision is not intended to effect any other program currently in place or being considered to improve conditions for local diverters.

- occurred absent the JPOD or transfer, and
- b) operation of the SWP's Clifton Court facility does not cause any additional draw down in the southern Delta during low tide.

or

- 2) An increase of total exports by using available capacity at the SWP's Banks Pumping Plant and
 - a) the three tidal barriers in Middle River, Old River, and Grant Line Canal are installed and fully operated,
 - b) the HOR barrier is not installed or operated to materially affect the flow of the San Joaquin River from entering Old River, and
 - c) Clifton Court Forebay is operated to cause no additional draw down in the southern Delta during the low tide.

<u>Condition II.</u> If an action covered by this Plan is proposed that does not meet the conditions described above, the action may still occur if at least one of the following conditions is met:

- a) Forecasts show the action will not cause or aggravate water levels of concern; or
- b) Adequate measures are available to offset the incremental effects of the action to water levels of concern. Reclamation and DWR have proposed to implement operational adjustments and install equipment (such as portable pumps) on a temporary basis to offset the incremental effects. It is recognized by both agencies that a program to install such equipment must be developed and implemented to ensure timely and effective mobilization of the necessary resources. DWR and Reclamation also agree to demonstrate the effectiveness of installing pumps on a temporary basis prior to using such measures as mitigation. To this end, DWR will work with SDWA to determine whether portable pumps can mitigate effects of JPOD or water transfers; or
- c) Reclamation and DWR determine that no diversions will occur at a location and during a period when the action will have an incremental effect on water levels.

Forecast Procedure.

To provide a methodology by which minimum (low tide) water levels within the SDWA service area can be forecasted under a proposed action covered by this Plan, DWR shall utilize the hydrodynamic component of its Delta Simulation Model 2 (DSM2). Model inputs will include projected tidal conditions at Benicia, projections of Delta inflows from the Sacramento River, Eastside streams and the San Joaquin River, average channel depletion needs for the month per the 1990 Draft Settlement Contract between SDWA and DWR, and projections of Delta exports by Contra Costa Water District, the State Water Project and the Central Valley Project at Clifton Court and Tracy Pumping Plant which reflect the proposed action. Under such conditions, the low water levels at Middle River near the Undine Road bridge, Old River near Tracy Road Bridge, Grant Line Canal near Tracy Road Bridge, and east of Coney Island

(DSM2Channel 218) shall be determined by running DSM2.

Water levels are considered adequate if they are forecasted to be 0.0 msl or greater at Old River near Tracy Road Bridge, and Grant Line Canal near Tracy Road Bridge, and 0.3 msl or greater at Middle River near the Undine Road Bridge.

The parties recognize that the Coney Island/Channel 218 location is downstream of the temporary barriers and will therefore often have water levels below that which is necessary for local diversions. The parties will evaluate previous water levels with times of diversion impacts to develop an initial baseline water level of concern, beyond which incremental effects of JPOD or transfer operations will warrant mitigation. A long-term solution for water levels of concern downstream of the barriers is to be developed within the CalFed South Delta Improvement Plan. Until such Plan is implemented, JPOD or transfer operations are contingent upon DWR and/or Reclamation providing adequate mitigation for incremental effects to water levels of concern for these diverters. Such mitigation may include diversion modifications, temporary pumps, or other measures. DWR, Reclamation, and SDWA will work together, and with the Management Agencies², to resolve issues related to such mitigation.

Notice and Modeling Requirements

No later than seven (7) days prior to any JPOD or transfer operations, DWR and/or Reclamation shall give SDWA notice thereof. If an emergency arises, DWR and Reclamation shall give SDWA as much notice as possible prior to any such action. An emergency does not include operational changes due to ESA limitations or requirements. Such notice shall include modeling forecasts for the time frame during which the JPOD or transfer is scheduled to occur. During any such JPOD or transfer operation, DWR or Reclamation shall update the modeling no less than every week and more often if conditions vary from those modeled in a manner that could be adverse to water levels.

Actual Water Level Problems

Reclamation and DWR will suspend the action upon request by SDWA if diverters within the South Delta experience water levels of concern, when and where no such levels were forecasted. Reclamation and DWR will update the forecasts and propose appropriate mitigation if applicable. At the time of the request, the SDWA will provide to DWR and Reclamation the time, location, and owner's name and contact information for the diversion experiencing the problem. The parties expect suspension of the action will normally occur within twelve hours after notification by SDWA and must occur no later than 24 hours after that notification. DWR and Reclamation will perform additional analyses of water level conditions within the SDWA. If DWR and Reclamation determine that the analyses show no incremental effect of the action at the reported location, Reclamation and DWR may continue the action. The analyses will include, but not be limited to, updated hydrodynamic modeling.

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² The Management Agencies include the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the California Department of Fish and Game.

The contacts for DWR and Reclamation are Curtis Creel and Paul Fujitani, respectively, or their designees. Reclamation and DWR will also provide SDWA with contacts for after-hours notification.

<u>Updated Modeling</u>

During the existence of this Plan, DWR, Reclamation and SDWA shall work together to improve the reliability of the modeling used to predict the effects of export pumping on South Delta water levels. The parties shall also work together to refine the definition of water levels in the South Delta below which local diversions become impaired. If additional or replacement definitions of said water levels are identified through this Plan, they shall be incorporated into this Plan.

Preventive Measures.

The parties shall work together to identify diversions which are most susceptible to impairment due to low water levels and attempt to develop actions which may mitigate any such low water levels at said diversions; perhaps lowering the water levels of concern. Any lowering of these concern levels shall only occur if all diversions within a particular area are identified and measures acceptable to the diverters are implemented. It is the goal of the parties that such measures would be at fair cost to the diverters and would minimize any interference thereto.

The parties recognize that dredging would be a valuable portion of any program to address water level issues and will be essential to prevent an increasing conflict between exports and South Delta diverters. DWR and Reclamation will implement a site specific dredging program in the south Delta for the benefit of agricultural diversions provided necessary regulatory permits can be obtained. DWR and Reclamation recognized that a comprehensive, long-term dredging program is desired by SDWA. However, such a program is viewed by both DWR and Reclamation to be beyond the scope of this water level response plan.

The parties agree that any actions or measures taken hereunder to assist local diverters shall not be considered a final resolution of the water level, circulation, or quality problems in the south Delta associated with the operation of the CVP and SWP export pumps, although such actions might be a portion of a long-term solution.

The diverters and water suppliers within the south Delta, excepting those diverters and water suppliers who export water for use outside of the Delta, are the beneficiaries of this Response Plan.

Names, phone numbers, and FAX numbers of representatives:

Primary Contact	Alternate Contact
Reclamation	
Mr. Chet Bowling	Mr. Paul Fujitani
Phone (916) 979-2180	(916) 979-2197

FAX (916) 979-2494

DWR

Mr. Carl Torgersen Mr. Curtis Creel Phone (916) 574-2656 (916) 574-2722 FAX (916) 574-2785

SDWA

Primary Contact:
Mr. John Herrick
Phone (209) 956-0150

Mr. Alex Hildebrand
Phone (209) 823-4166

FAX (209) 956-0154 FAX (209) 825-6180